49. (Added) The system of Claim 47 wherein said program controller receives input from said session database for establishing a starting point for said interactive lesson based on said user session information.

50. (Added) The system of Claim 6 wherein said plurality of databases further comprises at least one display prompt database for use in generating audio output for user selected portions of said visual output.

51. (Added) The system of Claim 1 wherein said plurality of databases includes at least one text power set database for use by said speech recognition means for interpreting user input.

REMARKS

Claims 1-43 were pending in the parent application, and Claims 10, 15, 20, 24 and 37, which are allowed in the parent application, have been cancelled by this Preliminary Amendment. This amendment responds to the new rejections raised in the Final Office Action dated June 21, 1999 for the parent application.

In the Final Office Action, Claims 1-9, 11-14, 16-19, 21-23, 25-36 and 38-43 stand rejected under 35 USC §102(e) as anticipated by Mostow, et al; Claims 11-12 are rejected as obvious in view of Mostow, et al; and Claims 21-23, 25-26, and 28-30 are rejected under 35 USC §103 as unpatentable in view of the combined teachings of Mostow and Shpiro; and Claims 31-36 and 38-40 as anticipated by Waters.

The Examiner has rejected Claims 1-9, 11-14, 16-19, 21-23 and 38-43 under 35 USC §102(b) given the teachings of the Mostow, et al reference. Applicants respectfully submit that the Mostow reference does not anticipate the invention as claimed. The Mostow reference provides for a reading coach that "listens" to student utterances and, if necessary, asks the student to repeat the suspect word and then speaks the correct word (see: Page 78, col. 1, line 17). The Mostow article specifically states that the system "...just has to detect where the reader is and which words were missed--it doesn't have to identify what the speaker said instead" (see: Page 77, Col. 2, lines 32-35). Moreover, the Mostow article defines "...mistakes as `important words that the reader failed to speak'" (Page 77, Col. 2, lines 19-20) and goes on to state that "mispronunciations...are not considered reading mistakes and must therefore be tolerated" (Page 77, Col. 1, lines 39-41). Therefore, it is clear that the Mostow system comprises a speech tracking system rather than a speech recognition system (Claims 1, 7, 21, 25, 29, 31, 40, 42) with speech recognition means and a program controller having access to at least one lesson-based speech interpretation database (Claims 1, 21 and 31); a plurality of phoneme sequences

and variations of said input text (Claims 29 and 30); a database of anticipated incorrect student responses (Claims 2 and 26); a database of all possible combinations of correct student responses (Claims 3 and 27); and/or at least one database of acoustic information for use by the speech recognition means in interpreting student responses (Claims 4, 5, 30, 41 and 43).

To anticipate an invention, a reference must teach each and every claimed feature. In light of the fact that the Mostow article does not teach a speech recognition system (Claims 1, 7, 21, 25, 29, 31, 40, 42) with speech recognition means and a program controller having access to at least one lesson-based speech interpretation database (Claims 1, 21 and 31); a plurality of phoneme sequences and variations of said input text (Claims 29 and 30); a database of anticipated incorrect student responses (Claims 2 and 26); a database of all possible combinations of correct student responses (Claims 3 and 27); and/or at least one database of acoustic information for use by the speech recognition means in interpreting student responses (Claims 4, 5, 30, 41 and 43), Applicants contend that an anticipation rejection cannot be maintained. Since the limitations of the independent Claims, 1, 7, 21, 25, 31 and 40 are clearly not taught by the Mostow article, neither those claims nor the claims which depend therefrom are anticipated by Mostow. It is further maintained that the claim features recited in those independent claims are not obviated by the Mostow article since Mostow neither teaches nor suggests actual speech

recognition, any lesson-based interpretation or any mistake detection other than a reader's failure to speak a word.

With respect to the rejection of Claims 11 and 12 under 35 USC §103, in view of the teachings of the Mostow reference, Applicants respectfully submit that, although the Mostow system does monitor where the student is in the text (i.e., tracks the student), and discusses that results should be evaluated, there are no teachings in the Mostow article which provide one skilled in the art with sufficient information to enable them to implement an automatic monitoring or evaluating function in combination with speech recognition. Since the Mostow system does not recognize speech and is not equipped to recognize or interpret any mistakes other than a reader's failure to speak a word, it cannot be maintained that the Mostow system monitors student progress based on responses (Claim 11, and also Claims 16, 23 and 33) nor that the Mostow system generates student progress information and stores same (Claim 12, and Claims 17 and 34).

In response to the Examiner's rejection of Claims 21-23, 25-26 and 28-30 based on a combination of the Mostow and Shpiro patent teachings, Applicants reiterate that the Mostow patent does not provide any speech recognition means (as set forth in independent Claims 21, 25) nor any lesson storage database for storing an interactively generated lesson (Claim 22), nor monitoring student progress, generating information regarding the student's progress, nor altering the level of interaction with the user based on the monitoring (Claim 23), nor at least one database of anticipated incorrect responses

(Claim 26). Further, the Shpiro patent does not disclose those teachings which are missing from the Mostow article. As set forth in arguments submitted in the parent patent application, the Shpiro system simply retrieves and presents a statically stored lesson. The Shpiro patent does not disclose any lesson storage database for storing an interactively generated lesson (Claim 22) nor does it teach monitoring and altering the level of interaction based on the monitoring (Claim 23), nor does it disclose the use of additionally stored acoustic information for speech interpretation (Claim 28). While Shpiro does include a database having one correct and several incorrect versions of the lesson text, such is not the same as teaching or suggesting the database of anticipated incorrect responses of Claim 26 in combination with the additionally cited limitations of Claim 25 from which it depends.

Similarly, Claims 29 and 30 are not obviated by the combination of teachings of Mostow and Shpiro. Claim 29 recites a means for inputting text to a system, means for generating a plurality of phoneme sequences of input text, along with means for generating a plurality of variations of the input text, and means for storing the generated information. Neither the Mostow nor the Shpiro patent teaches these automatic means for generating database information for later use in speech interpretation. Since neither patent teaches or suggests such means, it is respectfully maintained that the apparatus Claims 29-30 as well as the parallel method Claims 42 and 43 are allowable over the cited art.

Finally, the Examiner had rejected Claims 31-36 and Claims 38-40 as anticipated by the Waters patent. The Waters patent provides a language lesson system which compares student input to the "course of study", generates audio output and which further "varies the course...in dependence on the user's temporal history of correct and incorrect replies" (see: column 4, lines 40-47). It is respectfully submitted that the Waters system does not anticipate the claimed invention since the Waters system does not provide lesson-based speech recognition information to the speech recognition means. Rather, the Waters system interprets the student input and then compares it to the lesson to determine if the student input is correct or incorrect. The Waters system does not use the lesson-based speech recognition information in recognizing the student input (independent Claim 31 and Claims 32-36 and 38-39 which depend therefrom). Further, the Waters system simply keeps track of the "temporal history" of correct and incorrect replies, which does not anticipate the claimed monitoring of progress based on interpretation of student responses (Claim 33 and Claims 34-36 which depend therefrom). As such, Applicants believe that the Waters patent does not anticipate the invention as set forth in Claims 31-36 and 38-39.

While the Examiner has cited the Waters patent against Claim 40 as well, Applicants believe that the previously-submitted amendments, which are reiterated in this Preliminary Amendment to the continuation application, successfully distinguish Claim 40 from the teachings of the Waters patent. The Waters patent does not provide an acoustic

interpretation database, nor does it interpret student responses using any input that is lesson-based. Therefore, Applicants assert that the Waters patent does not anticipate Claim 40.

In light of the foregoing, it is respectfully requested that the objections and rejections to this Application be reconsidered and withdrawn, the newly submitted claims be entered, and the remaining Claims 1-9, 11-14, 16-19, 21-23, 25-36, 38-40 and 42-51 be passed to issuance.

Respectfully submitted,

H. W. Adams, et al

By: _Anne Vachon Dougherty_
Anne Vachon Dougherty
Registration No. 30,374
Tel. (914) 962-5910